

Van Stone Mine Cleanup Site



West End Pit Lake in the Waste Rock Area, 2014.

Comments accepted:

May 15 – June 16, 2023

Submit comments

Online:

<https://bit.ly/VanStoneComments>

Mail:

Brendan Dowling, Site Manager
 4601 N. Monroe St.
 Spokane, WA 99205

Email:

Brendan.Dowling@ecy.wa.gov

Questions: 509-329-3611

Review documents

Online:

<https://bit.ly/EcologyVanStone>

In print:

Onion Creek School District
 2006 Lotze Creek Road
 Colville, WA 99114
 Hours: M–F, 8:30 a.m. – 3 p.m.
 Call for appt.: 509-732-4240

Onion Creek General Store
 2191 Onion Creek Road
 Colville, WA 99114
 Hours: M–Fri., 8 a.m. – 5 p.m.
 Phone: 509-732-6648

Site info

Facility Site ID: 1554858
 Cleanup Site ID: 461

Draft cleanup plan ready for public review and comment

You are invited to review and comment on the draft Cleanup Action Plan for the Van Stone Mine. The cleanup site is 24 miles northeast of Colville off Van Stone Road in the Onion Creek watershed.

In the plan, the Washington Department of Ecology proposes to (see page 2 for a site map showing these areas):

- Consolidate the Upper Tailings Pile and the dangerous waste at the Mill Area/Waste Rock Area onto the Lower Tailings Pile.
- Consolidate dispersed tailings from the Tailings Pipelines on the Lower Tailings Pile and regrade the pile to decrease the slope.
- Install a cover system over the Lower Tailings Pile to prevent rain and snowmelt from infiltrating it. The cover would be 12-oz. nonwoven geotextile, 60-mil HDPE geomembrane, 12-oz. nonwoven geotextile, a Geonet drainage geotextile, 2 feet of borrow material, and 1 foot of vegetated topsoil.
- Grade the Waste Rock Area to match the surrounding area.
- Address the spillway at the North Pit Lake by installing a buttress, increasing the cross section, and flattening the slopes to stabilize and bring it under Dam Safety requirements. We are working on improving the dam before the rest of cleanup. The engineering design will be available for public comment before work begins.

The goals of cleanup are to prevent people and animals from contacting remaining mining waste and to prevent dam failure at North Pit Lake.

Public meeting, June 8

We are holding a public meeting to explain the proposed cleanup plan, answer your questions, and accept written comments.

- 6 p.m., Thursday, June 8, 2023
- Onion Creek School District, 2006 Lotze Creek Road, Colville

Cleanup site overview

The site is divided into the following contaminated areas:

- The former Mill Area, two open pits, and Waste Rock Area, which includes West End Pit Lake and the Pit Lake Dam (AOI-1)
- Upper and Lower Tailings Piles (AOI-2 and AOI-3, respectively)
- Tailings Pipelines and access roads (AOI-4)
- Onion Creek and its tributaries (AOI-5)

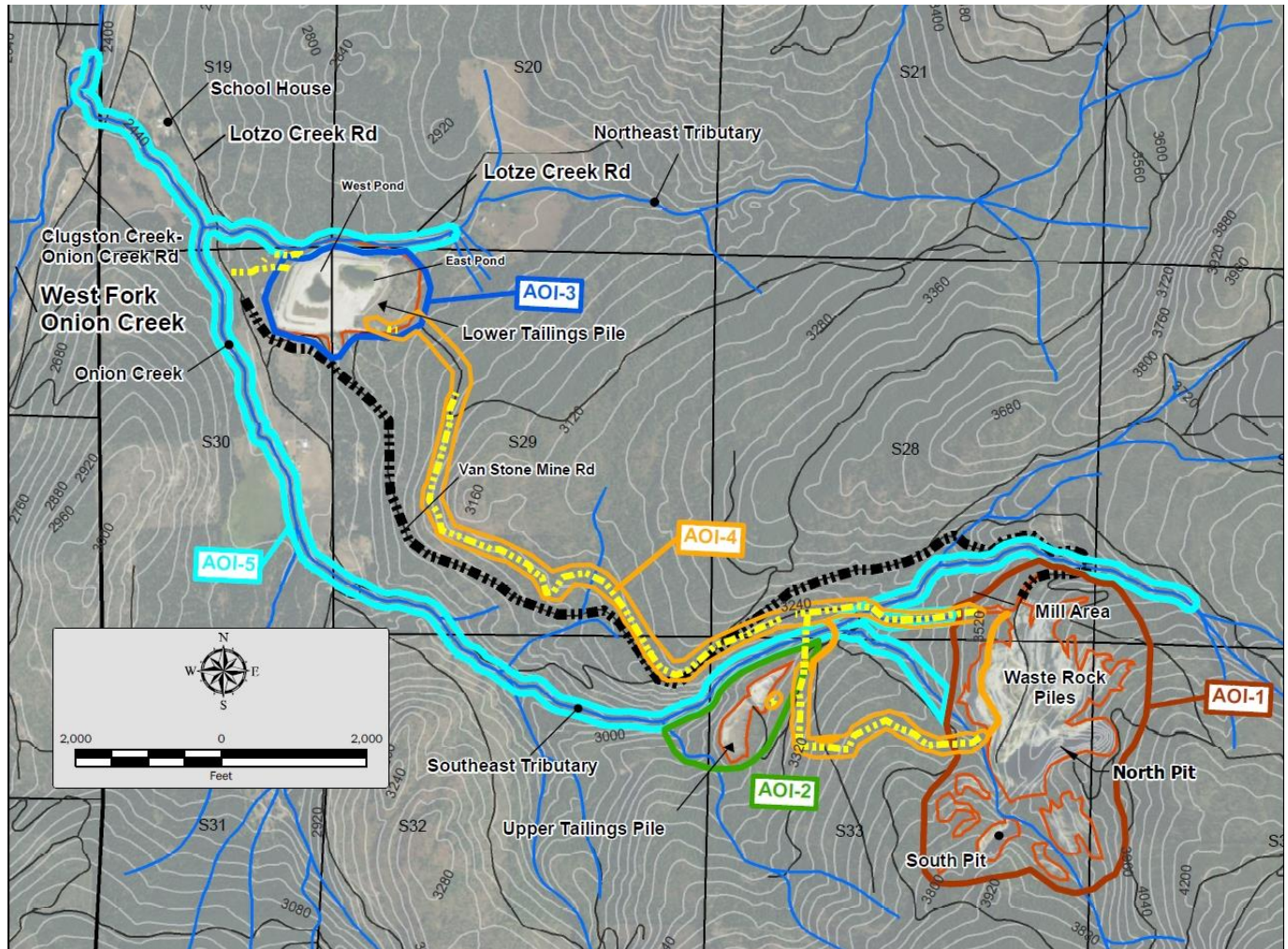


Figure 1. Site map showing contaminated areas.

The estimated cost of cleanup is \$14 million. Ecology has used funds from former mine owner American Smelting and Refining Company’s (ASARCO) bankruptcy proceedings to investigate the contamination and plan the cleanup.

Because they now own parts of the site, Ecology has also identified Callahan Mining Corporation, Daniel Paul Sr., Equinox Resources (Wash.) Inc., Sundown Holdings Ltd., Vaagen Brothers Lumber Co., Inc., and Weavers Professional Services, Inc., as being potentially responsible for cleanup costs.

Toxics Cleanup Program

Contaminants

Contaminants vary by area, but in general, soil is contaminated with antimony, arsenic, cadmium, lead, mercury, and zinc.

Surface water discharging into Onion Creek tributaries from tailings piles also has levels of contaminants requiring cleanup. The proposed cleanup doesn't include surface water treatment; however, by addressing the tailings piles and covering remaining contamination, we will stop contaminants from reaching surface waters.

Mining history

The Van Stone Mine operated on and off from 1938 to 1993 as an underground and then open-pit lead and zinc mine. To support open-pit operations, ASARCO constructed a flotation mill to process the ore mined on-site. Blasted rock not classified as ore was placed into waste rock dumps around the open-pit operations.

As the ore was processed through the flotation mill, lead and zinc concentrates were produced. Milling process material not classified as concentrates (tailings) was moved through pipelines to the tailings piles. Water used to transport tailings was most likely poured off and allowed to flow into drainages connected to Onion Creek.

The Upper Tailings Pile was used until a berm failure in 1961 released water and tailings into

an Onion Creek tributary. The Lower Tailings Pile replaced it until the mine closed. In 1992, Equinox placed a polyvinyl chloride (PVC) liner over it and constructed a seepage collection pond out of tailings. Tailings were then placed on the PVC liner when mining operations briefly restarted. A PVC geomembrane was also installed over the Upper Tailings Pile for emergency tailings storage.

After final shutdown, mine buildings, access roads, waste rock, process tailings, and exposed mining faces remained. Since then, the sun has degraded the PVC geomembranes.

Next steps

Ecology will consider all comments received during this public comment period, which may cause changes to the draft cleanup plan. If the plan changes significantly, we will hold another public comment period.

If no significant changes are made, Ecology will finalize the plan and proceed with cleanup. Figure 2 shows the stages of cleanup and what remains in the process.

Ecology's cleanup process

The Model Toxics Control Act (MTCA) is Washington's environmental cleanup law. It provides requirements for contaminated site cleanup and sets standards that protect people and the environment. Ecology implements the MTCA cleanup process.

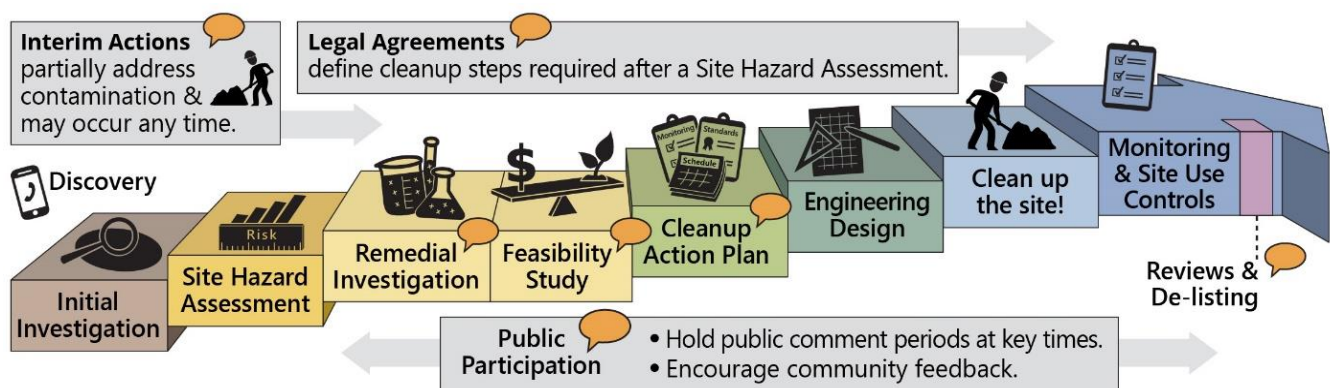


Figure 2. The steps in Washington's formal cleanup process.

Toxics Cleanup Program
4601 N. Monroe St.
Spokane, WA 99205

Van Stone Mine Cleanup Site

Draft cleanup plan ready for public review and comment

You are invited to review and comment on the draft Cleanup Action Plan for the Van Stone Mine. The proposed cleanup would consolidate and cover contaminated material, decrease steep slopes, and improve the spillway at North Pit Lake.

Public Comment Period

May 15 – June 16, 2023

<https://bit.ly/EcologyVanStone>

Public Meeting

- 6 p.m., Thursday, June 8
- Onion Creek School District, 2006 Lotze Creek Road, Colville

ADA accessibility

To request an ADA accommodation, contact Ecology by phone at 360-407-6831 or email at ecyadacoordinator@ecy.wa.gov, or visit ecology.wa.gov/Accessibility. For Relay Service or TTY, call 711 or 877-833-6341.